

merits and its defects, will be the best means of settling the question. We therefore present the following translation from the Portuguese, of the article alluded to :

"We have not been the last to speak against the application of the theory of the microbes in medicine, and to ascribe to it those great inconveniences which the acceptance of these doctrines may introduce into pathology. When we wrote that these theories, almost totally hypothetical, were leading medicine into a bad path, in attributing to morbid phenomenon a simplicity which it is far from possessing, and conducting to irrational means of treatment, which were dangerous to patients, we were accused of exaggeration and prejudice, whilst we were but echoing the convictions of a great number of clinicians, and it was the fact that a manifest reaction has arisen against these tendencies, among French pathologists. Those physicians who employ remedies impartially, or, so to say, in an experimental way, have evidently accepted the theories of Pasteur, under the hope of obtaining advantages from them in their treatment of diseases ; in no other way can we explain the progress of the parasitic doctrine and the rather premature haste with which it has been accepted, chiefly by the younger members of the profession. So very important is it to vanquish a disease, or to discover its cause, and so positive has Pasteur been, that a good many physicians have judged, that if it is the fact that infectious diseases are caused by microbes, to kill these parasites is to cure the patient.

All practitioners who reason thus, forget just one thing, as does Pasteur, which however should be taken into consideration ; and this is, *the patient*. Yes, there is, unfortunately, a patient in the question of the microbes, as regards pathology. The matter is not so simple as it is in the laboratory, in which if a microbe is put into a bottle to multiply, and to exhaust the strength of a quantity of chicken broth, no more is then required than to add some powerful poison, the most energetic of the antiseptics, and everything disappears, everything, if we believe Pasteur, except the germs of these singular vegetables. But when we have in hands a patient however filled, he may be supposed to be with microbes, we cannot treat him as we do the chicken broth, with strong antiseptics. Some physicians have done this, and Mons. Jaccoud,

whose great ability no person contests, has shown us in his recently published lectures on the treatment of typhoid fever, the result of these bold attempts. In the statistics of mortality of typhoid fever, the employment of antiseptics, in large doses, has introduced an element which previously figured very exceptionally—*sudden death*.

It is beyond doubt that setting out from the preconceived idea that typhoid fever results from the development of microbes in the economy, physicians have been forcibly led to employ antiseptics. Recourse is had to those which are most tolerable to the organism, as salicylic acid, sulphate of quinine, carbolic acid. As the administration of these medicines in small doses produces no result, logic demands that the doses shall be increased until the troublesome microbe is annihilated ; as has already been said, the patient is forgotten, but he, in his turn, when the dose is sufficient, does not forget to die suddenly. Sudden death is, I know, one of the results which may be introduced into the art of curing by the discoveries of Pasteur. When we reflect on these facts we must regard it as extraordinary, that doctrines leading to such results have been able to gain the vogue in medical practice, in which the practitioner has certainly no interest in losing his clients.

But granting that the theories of Pasteur are correct, and that typhoid fever is in reality the product of an invasion of microbes, evidently no result profitable to therapeutics can be derived from the knowledge of this fact, for the simple reason, that the organism does not tolerate doses of antiseptics sufficient to kill, in the blood, or in the middle of our tissues, inferior parasitic organisms, whose resistance to these agents is greater than that of the cells of our economy, which are differentiated in a far higher degree. To believe that we can find an antiseptic capable of destroying bacteria, and leaving uninjured the histological elements of man, is but to seek to be deluded, and to ignore the laws of general physiology. The more differentiated an organism is, the less resistance does it oppose to the external agents capable of injuring it ; consequently it may be affirmed, that of all the organic cells, the bacteria are perhaps the most resistant of the action of toxic and antiseptic substances. Be this as it may, it is beyond doubt that typhoid patients, to whom anti-